

ABSTRACT OF THE DISCLOSURE

An information recording medium for recording a real-time file containing real-time data in such a manner that the real-time data is continuously reproducible by a playback reference model, the real-time data including at least one of video data and audio data. The playback reference model includes: a pickup for reading the real-time data from the information recording medium; a buffer memory for temporarily storing the real-time data read by the pickup; and a decoder module for reading the real-time data from the buffer memory for processing. The information recording medium includes a volume space for at least recording in sectors a file containing data and file management information for managing the file. The real-time data is recorded in at least two real-time extents each of which is allocated in logically contiguous sectors within the volume space. An $(i+1)^{\text{th}}$ real-time extent among the at least two real-time extents is positioned at a position satisfying a real-time reproduction condition.